

General Certificate of Secondary Education

B453

Physical Education

Developing Knowledge in Physical Education

Specimen Paper

Time: 1 hour

Candidates answer on the question paper.

Additional materials:

Candidate
Forename

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Candidate
Surname

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Centre
Number

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Candidate
Number

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

INSTRUCTIONS TO CANDIDATES

- Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each answer carefully and make sure you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do not write in the bar codes.
- Do not write outside the box bordering each page.
- Write your answer to each question in the space provided.

INFORMATION FOR CANDIDATES

- The number of marks for each question is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is 40.

Section A

Answer **all** questions.

- 1 Identify one reason why it is good to follow an active, healthy lifestyle. [1]
- 2 Briefly describe the long-term effects of exercise on the heart. [3]
- 3 Identify two fundamental motor skills that would be part of the long jump. [2]
- 4 Identify two problems that could occur if joints are not healthy. [2]
- 5 What are the negative effects on health of illegal blood doping? [2]
- 6 There are recognised principles of training. One of these is reversibility.
What is meant by reversibility when training for an active lifestyle? [2]
- 7 Describe how local sporting facilities can encourage participation in physical activities. [3]
- 8 Describe an occasion when correct carrying technique will reduce the chance of injury during or preparing for a physical activity. [2]
- 9 How do schools promote an active, healthy lifestyle? [3]
- 10 Briefly explain why the body produces lactic acid when exercising. [2]
- 11 Explain how goal setting can help to improve in their ability to perform a physical activity. [4]
- 12 Explain how skills in physical activities can be learned effectively. [4]
- 13 Describe three ways of minimising risks when following an active lifestyle. [3]
- 14 Identify and explain three extrinsic motivating factors that are important for a performer learning new skills. [3]
- 15 Explain the difference between aerobic and anaerobic exercise. [4]

Paper Total [40]

[BLANK PAGE]

SPECIMEN

SPECIMEN

Copyright Acknowledgements:

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (OCR) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest opportunity.

OCR is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

© OCR 2008

The maximum mark for this paper is [40].

SPECIMEN

| Question Number | Answer | Max Mark |
|-----------------|--|----------|
| 1 | <p>Identify one reason why it is good to follow an active, healthy lifestyle.</p> <p>One mark for one of:</p> <ol style="list-style-type: none"> 1. To be able to exercise for long periods of time. 2. Any positive physiological adaptations (eg stronger heart / lungs) 3. To be able to recover quickly. 4. To live longer / to be healthy / any identified health benefits / to avoid illness / heart attacks/problems/CHD. 5. To make friends / socialise. 6. To feel better / emotional benefits / enjoyment. | [1] |
| 2 | <p>Briefly describe the long-term effects of exercise on the heart.</p> <p>Three marks total. One for each correct response:</p> <ol style="list-style-type: none"> 1. Makes heart stronger / causes hypertrophy. 2. Heart gets bigger / chambers increase in volume. 3. At rest, heart rate will be lower. 4. Greater cardiac output / increases amount of blood pumped by heart in one minute. 5. Greater stroke/blood volume/amount of blood pumped per beat. 6. More blood capillaries in/around the heart (to avoid heart problems/attacks/CHD). | [3] |
| 3 | <p>Identify three fundamental motor skills that would be part of the long jump.</p> <p>Two marks total. One for each correct response:</p> <ol style="list-style-type: none"> 1. Running – the run up. 2. Jumping – the jump. | [2] |
| 4 | <p>Identify two problems that could occur if joints are not healthy?</p> <p>Two marks total. One for each correct response:</p> <ol style="list-style-type: none"> 1. Stiffness / soreness. 3. Inflammation. 4. Arthritis. 5. Lupus. 6. Osteoarthritis. | [2] |

| Question Number | Answer | Max Mark |
|-----------------|--|----------|
| 5 | <p>What are the negative health effects of illegal blood doping?</p> <p>Two marks total. One for each correct response:</p> <ol style="list-style-type: none"> 1. Injection site infections / risk of blood infection / AIDS. 7. Increase in blood pressure. 8. Heart problems / failure. 9. Kidney problems / failure. | [2] |
| 6 | <p>There are recognised principles of training. One of these is reversibility.</p> <p>What is meant by reversibility when training for an active lifestyle?</p> <p>Two marks total. One for each correct response:</p> <ol style="list-style-type: none"> 1. Improvement slows / stops. 2. When training is decreased / stopped. 3. If stopped fitness gained can be lost / decrease in VO2 max / strength / flexibility etc. | [2] |
| 7 | <p>Describe how local sporting facilities can encourage participation in physical activities.</p> <p>Three marks total. One mark for each correct response:</p> <ol style="list-style-type: none"> 1. Facilities provided by the local authority/city/town council. 2. Through private enterprise/clubs. 3. Giving wide variety from which to choose. 4. Subsidies / making activities affordable. 5. Being local means easy access. 6. By providing specific group sessions e.g. over 50's / women only. 7. Giving taster courses / providing specific coaching/teaching. 8. Encouraging those with disabilities by ease of access e.g. wheelchair ramps. 9. Providing transport to the facilities. 10. Effective advertising / promotion of their activities. | [3] |
| 8 | <p>Describe an occasion when correct carrying technique will reduce the chance of injury during or preparing for a physical activity.</p> <p>Two marks total. One mark for each correct response:</p> <ol style="list-style-type: none"> 1. Bending legs / use of large muscle groups. 2. Keeping back straight / protecting the back muscles. 3. When lifting / carrying equipment in the sports hall. 4. Do not lift/carry unless necessary. 5. Enlist the help of others / use lifting / carrying equipment. | [2] |

| Question Number | Answer | Max Mark |
|-----------------|--|----------|
| 9 | <p>How do schools promote an active, healthy lifestyle?</p> <p>Three marks total. One mark for each correct response:</p> <ol style="list-style-type: none"> 1. National curriculum / lessons in PE / educating about benefits. 2. Examination courses / national qualifications. 3. Teachers being role models / using / visits by external role models. 4. Coaching courses / qualifications. 5. Extra curricular clubs / activities. 6. Sports teams. 7. Links with exercise clubs / sports clubs. 8. Promotions / leaflets / healthy eating days / posters. 9. Canteen having healthy food available / no junk food / vending machines for junk food. | [3] |
| 10 | <p>Briefly explain why the body produces lactic acid when exercising.</p> <p>Two marks total. One mark for each correct response:</p> <ol style="list-style-type: none"> 1. Due to all out effort/body cannot cope with intensity of exercise. 2. Not enough oxygen/no oxygen. 3. Due to working for a long time. | [2] |
| 11 | <p>Explain how goal setting can help to improve in their ability to perform a physical activity.</p> <p>Four marks total. One for each correct response: Each point must be an explanation.</p> <ol style="list-style-type: none"> 1. S – Specific – the goals must be for a selected skill or outcome. 2. M – Measurable – must be able to check / assess how well you are doing. 3. A – Agreed – to be shared between coach and performer to give common purpose. 4. R – Realistic – within the reach of the performer to give confidence. 5. T – Time-phased – short term goals lead to long term to give progression/success. 6. E – Exciting – they must stimulate/give interest that motivates. 7. R – Recorded – they must be written down to motivate and for success to be checked off/to ensure that all are covered. | [4] |

| Question Number | Answer | Max Mark |
|-----------------|--|----------|
| 12 | <p>Explain how skills in physical activities can be learned effectively.</p> <p>Four marks total. One mark for each correct response:</p> <ol style="list-style-type: none"> 1. Practice / rehearsal. 2. Copying / watching others / imitating. 3. Role models / qualified teachers/coaches will motivate to learn. 4. training for better physical fitness / fitness training. 5. Trial and error / having a go at the skills. 6. Being taught. 7. Through extrinsic motivation / rewards. 8. By enjoyment / having fun learning. 9. By learning part of the skill then building on it / whole-part-whole / learn sub routines. | [4] |
| 13 | <p>Describe three ways of minimising risks when following an active lifestyle.</p> <ol style="list-style-type: none"> 1. Correct technique / strategies. 2. Be fit for your activity. 3. Keep under control / control emotions. 4. Correct footwear. 5. Correct clothing. 6. Not wearing jewellery. 7. Use protective equipment. 8. Knowledge of health and safety procedures / be aware of the dangers. 9. Appropriate level of competition / not trying to do things beyond your capabilities. 10. Warm up / cool down / physical preparation. | [3] |
| 14 | <p>Identify and explain three extrinsic motivating factors that are important for a performer learning new skills.</p> <p>Three marks total. One for each correct response:</p> <ol style="list-style-type: none"> 1. Rewards / badges / trophies. 2. Positive feedback/encouragement from others/coaches/teachers. 3. Knowing how well you are doing / knowledge of results. 4. This raises arousal levels that drive the learner to succeed. 5. This raises the confidence levels of the learner. 6. This can help to control anxiety. | [3] |

| Question Number | Answer | Max Mark |
|-----------------|---|----------|
| 15 | <p>Explain the difference between aerobic and anaerobic exercise.</p> <p>Four marks total. One for each correct response:</p> <p>Aerobic</p> <ol style="list-style-type: none"> 1. Aerobic is about cardiovascular endurance / fitness of heart, blood and blood vessels. 2. It involves the presence of oxygen. 3. Aerobic work involves the ability to exercise for a long time. 4. Examples of aerobic activities are: interval training / fartleack training / circuit training / cross training / aerobics / continuous running for over 20 minutes. <p>Anaerobic</p> <ol style="list-style-type: none"> 5. Anaerobic is about ability to work at a high intensity 6. For a short period of time. 7. Anaerobic is without oxygen. 8. Examples of anaerobic activities are: sprint running / sprint swimming / players in a netball or basketball match who work for up to about 40 seconds. | [4] |
| Paper Total | | [40] |

Assessment Objectives Grid

| Question | AO1 | AO2 | AO3 | Total |
|---------------|-----|-----|-----|-------|
| 1 | 1 | - | - | 1 |
| 2 | 1 | - | 2 | 3 |
| 3 | 2 | - | - | 2 |
| 4 | 2 | - | - | 2 |
| 5 | 2 | - | - | 2 |
| 6 | 2 | - | - | 2 |
| 7 | 1 | - | 2 | 3 |
| 8 | 2 | - | - | 2 |
| 9 | 3 | - | - | 3 |
| 10 | 2 | - | - | 2 |
| 11 | 2 | - | 2 | 4 |
| 12 | 2 | - | 2 | 4 |
| 13 | 3 | - | - | 3 |
| 14 | 3 | - | - | 3 |
| 15 | 2 | - | 2 | 4 |
| Totals | 30 | 0 | 10 | 40 |